



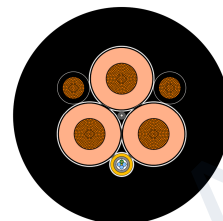
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

(N)TSCGEW11Y 6/10 kV CABLE

High-voltage shore power cable with optical fiber element



APPLICATION

High-voltage shore power cable for connecting vessels to the harbour main grid. Designed for HVSC systems on container vessels, cruise liners and mobile harbour equipment.

KEY FEATURES

Parameter	Value
Application	High-voltage shore power cable for vessel-to-grid connection at harbour quays
Voltage rating	6/10 kV for HVSC systems, according to IEC/ISO/IEEE 80005-1
Fiber element	12 fibers G62.5/125 OM1 optical fiber for communication and data
Water service	Suitable for permanent immersion and pressure up to 10 bar, protection class AD8

DESIGN

Parameter	Value
Main cores	Tinned copper Class 5 with triple-extruded EPR insulation and semiconductive screens
Ground conductor	Tinned copper Class 5 with semiconductive layer
Pilot cores	Eight screened pilot cores, EPR insulated, white with black numerals
Sheath	Thermoplastic TPU inner and outer sheath, high wear resistance

ELECTRICAL, THERMAL, MECHANICAL AND MATERIAL DATA

Parameter	Value
Rated voltage U0/U	6/10 kV
Max. AC operating voltage	6.9/12 kV
Max. DC operating voltage	9/18 kV
AC test voltage	21 kV
Conductor temperature	90 deg C; short circuit 200 deg C
Ambient temperature, fixed	-40 deg C to +90 deg C
Ambient temperature, reeling	-30 deg C to +90 deg C
Bending radius, fixed	6 x cable diameter
Bending radius, free movement	10 x outer diameter
Bending radius, reeling	12 x cable diameter
Tensile load per conductor	Maximum 25 N/mm ²
Optical fiber	G62.5/125 OM1 according to IEC 60793-2-10
Standards	IEC/ISO/IEEE 80005-1; DIN VDE 0298-3 and 0298-4
Environment	Halogen-free, oil-resistant, UV/ozone/moisture resistant

TECHNICAL DATA

(N)TSCGEW11Y 6/10 kV - SHORE POWER DATA						
Configuration	Main core size	Outer diameter min.-max. mm	Approx. weight kg/km	Fixed bend radius	Free bend radius	Reeling bend radius
3x70+2x35/2+1x(8x2.5)C+FO	3x70	66-69	6505	6 x D	10 x D	12 x D
3x95+2x50/2+1x(8x2.5)C+FO	3x95	68-71	7440	6 x D	10 x D	12 x D
3x120+2x70/2+1x(8x2.5)C+FO	3x120	71-74	8465	6 x D	10 x D	12 x D
3x185+2x95/2+1x(8x2.5)C+FO	3x185	74-77	10000	6 x D	10 x D	12 x D

CONSTRUCTION AND APPLICATION NOTES

Parameter	Value
Main insulation	Triple-extruded EPR system with inner and outer semiconductive screens
Pilot cores	Eight screened pilot cores, EPR insulated and numbered
Optical fiber	12-fiber G62.5/125 OM1 element in the interstices
Sheath	Thermoplastic TPU inner sheath and outer sheath
Water service	Suitable for complete immersion and pressure up to 10 bar, AD8

CERTIFICATIONS



TEBAOFLEX CABLE